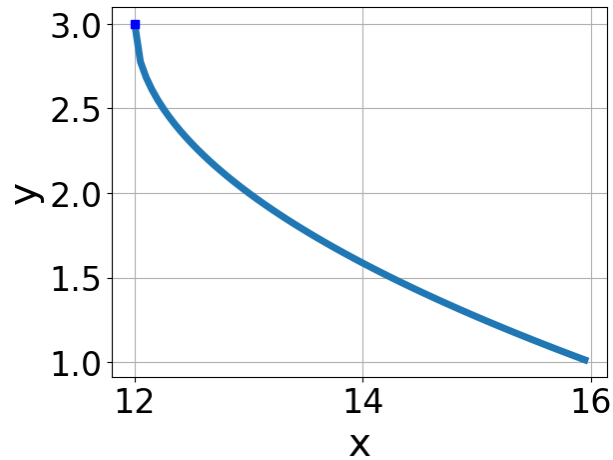


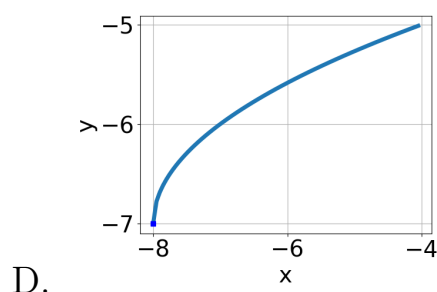
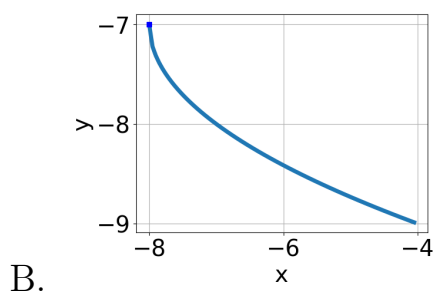
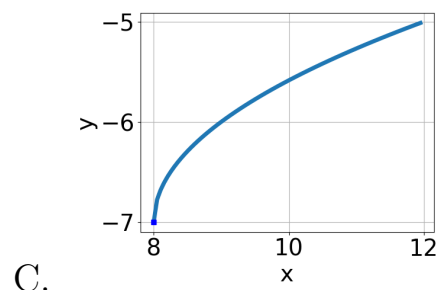
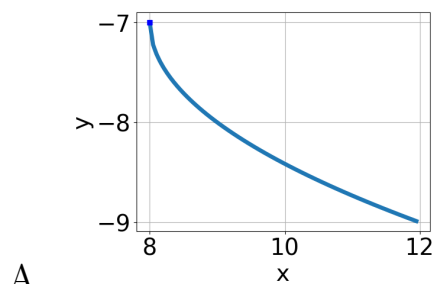
1. Choose the equation of the function graphed below.



- A. $f(x) = \sqrt[3]{x+12} + 3$
 B. $f(x) = -\sqrt[3]{x-12} + 3$
 C. $f(x) = -\sqrt[3]{x+12} + 3$
 D. $f(x) = \sqrt[3]{x-12} + 3$
 E. None of the above

2. Choose the graph of the equation below.

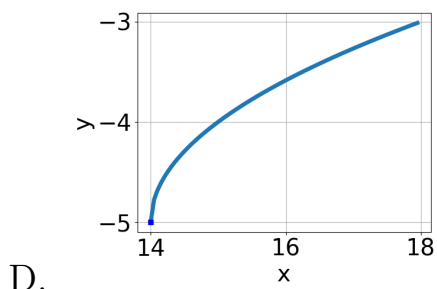
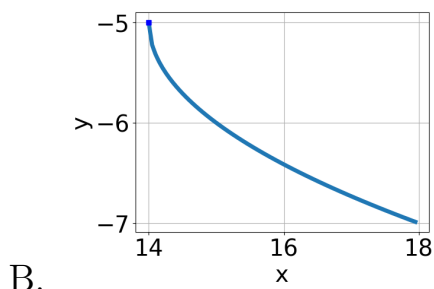
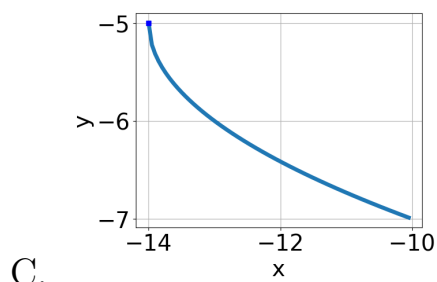
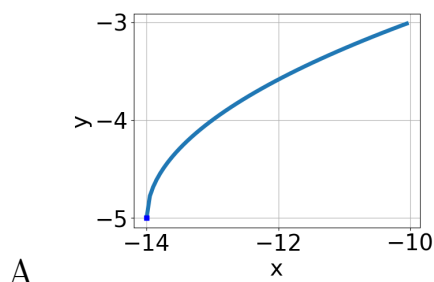
$$f(x) = -\sqrt{x-8} - 7$$



E. None of the above.

3. Choose the graph of the equation below.

$$f(x) = \sqrt{x + 14} - 5$$



E. None of the above.

4. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{-9x^2 - 15} - \sqrt{24x} = 0$$

A. All solutions lead to invalid or complex values in the equation.

B. $x_1 \in [1.62, 1.72]$ and $x_2 \in [-0.1, 3.5]$

C. $x \in [-1.13, -0.71]$

D. $x \in [-1.83, -1.09]$

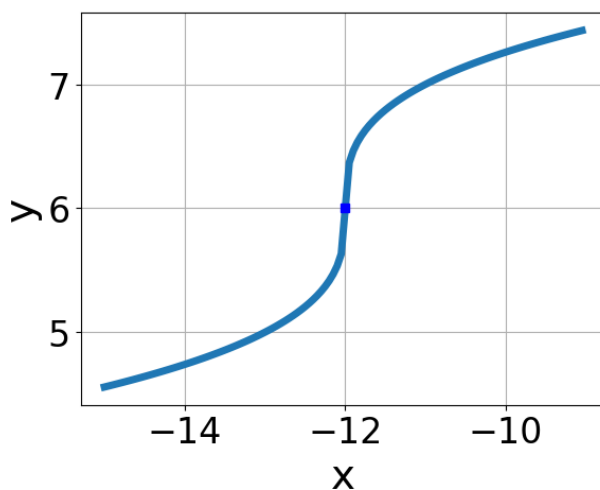
E. $x_1 \in [-1.83, -1.09]$ and $x_2 \in [-3.3, 0.8]$

5. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{3x - 6} - \sqrt{7x + 5} = 0$$

- A. $x_1 \in [-0.81, -0.31]$ and $x_2 \in [1, 4]$
B. $x \in [-3.45, -2.19]$
C. $x \in [-0.25, -0.06]$
D. $x_1 \in [-3.45, -2.19]$ and $x_2 \in [1, 4]$
E. All solutions lead to invalid or complex values in the equation.
-

6. Choose the equation of the function graphed below.



- A. $f(x) = -\sqrt[3]{x - 12} + 6$
B. $f(x) = -\sqrt[3]{x + 12} + 6$
C. $f(x) = \sqrt[3]{x - 12} + 6$
D. $f(x) = \sqrt[3]{x + 12} + 6$
E. None of the above
-

7. Solve the radical equation below. Then, choose the interval(s) that the

solution(s) belongs to.

$$\sqrt{-16x^2 - 45} - \sqrt{-58x} = 0$$

- A. $x \in [2.1, 3.1]$
 - B. All solutions lead to invalid or complex values in the equation.
 - C. $x_1 \in [0.6, 1.2]$ and $x_2 \in [2.5, 3.5]$
 - D. $x \in [0.6, 1.2]$
 - E. $x_1 \in [-1.9, -0.7]$ and $x_2 \in [-3.5, 1.5]$
-

8. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{3x + 4} - \sqrt{-9x + 7} = 0$$

- A. $x_1 \in [-2.5, -1.27]$ and $x_2 \in [-0.21, 0.62]$
 - B. $x \in [-0.67, 1.18]$
 - C. $x_1 \in [-2.5, -1.27]$ and $x_2 \in [0.5, 0.91]$
 - D. All solutions lead to invalid or complex values in the equation.
 - E. $x \in [-1.12, -0.11]$
-

9. What is the domain of the function below?

$$f(x) = \sqrt[4]{8x - 7}$$

- A. $(-\infty, \infty)$
 - B. $(-\infty, a]$, where $a \in [1.05, 1.54]$
 - C. $(-\infty, a]$, where $a \in [0.46, 1.03]$
 - D. $[a, \infty)$, where $a \in [1.13, 1.28]$
 - E. $[a, \infty)$, where $a \in [0.71, 0.89]$
-

10. What is the domain of the function below?

$$f(x) = \sqrt[3]{8x - 9}$$

- A. $(-\infty, \infty)$
 - B. The domain is $[a, \infty)$, where $a \in [0.91, 1.47]$
 - C. The domain is $[a, \infty)$, where $a \in [0.58, 1.05]$
 - D. The domain is $(-\infty, a]$, where $a \in [0.99, 1.35]$
 - E. The domain is $(-\infty, a]$, where $a \in [0.52, 1.05]$
-